

CLAIMS

1. An electrically conductive silicone rubber composition comprising:

(A) 100 parts by weight of an organopolysiloxane having at least two alkenyl groups per molecule,

5 (B) an amount sufficient to cure composition of an organopolysiloxane having at least two silicon-bonded hydrogen atoms per molecule,

(C) an amount sufficient to promote cure of the composition of a platinum based catalyst,

(D) 50 to 5,000 parts by weight of a metal based electrically conductive filler, and

10 (E) 5 to 500 parts by weight of spherical silicone rubber particles with a surface active agent content of not more than 0.3 wt%.

2. The composition of claim 1, where the content of component (B) provides from 0.1 mol to 10 mol of silicon-bonded hydrogen atoms from component (B) per 1 mol of alkenyl groups of component (A).

3. The composition of claim 1, where the content of component (C) provides, in weight terms, from 0.1 ppm to 10,000 ppm of platinum metal from component (C) relative to total weight of component (A) and component (B).

4. The composition of claim 1, where component (D) comprises an electrically conductive metal powder or a micropowder plated or coated with metal via vapor deposition.

5. The composition of claim 1, where component (E) comprises spherical silicone rubber particles obtained by curing a silicone rubber composition emulsified in an aqueous solution of a surface active agent.

6. The composition of claim 1, where component (E) comprises spherical silicone rubber particles from which excess surface active agent has been removed by washing with water.

7. The composition of claim 1, further comprising (F) 0.001 parts by weight to 5 parts by weight, per 100 parts by weight of component (A), of a reaction inhibitor.

8. The composition of claim 1, further comprising (G) 0.1 parts by weight to 100 parts by weight, relative to the total amount of component (A) to component (E) as 100 parts by weight, of an organic solvent.

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9. Use of the composition of any of claims 1-8 for pressure forming, transfer molding, injection molding, or calender molding.

10. A product prepared by curing the composition of any of claims 1-8.

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11. Use of the product of claim 10 as an electrically conductive adhesive, heat-radiating adhesive, or electromagnetic wave shielding agent.

12. Use of the the product of claim 10 for making flexible connectors, anisotropic electrically conductive films, and various other electrode materials, or for heat-radiating materials.

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